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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,343	12/19/2001	Georg Weihrauch	18899.8	2511

7590 03/25/2004
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EXAMINER

LAMB, BRENDA A

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,343

Applicant(s)

Weihrauch

Examiner

LAMB

Group Art Unit

1734

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 12/19/2001
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 15-28 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 15-28 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____
- ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 12/19/2001 ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other _____

Office Action Summary

Claims 15-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 28 is confusing since it is unclear how filaments can be both parallel and twisted. In view of specification at page 7 last two lines, it is suggested that applicant amend claim 28 at line 3 after "parallel" insert --, -- and after "twisted" insert --, --. Claim 15 is confusing since it is clear how technical properties differs from the physical properties. Claim 20 is confusing since the claimed forms of the core are not mutually exclusive, that is, a plaited core is a woven core.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-19, 21 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham 5,601,775 in view of Hager.

Cunningham teaches a method for manufacturing an abrasion resistant multi-component monofilament having a preformed core with a jacket adhered thereon wherein the composition of the core and jacket are different thereby resulting in the core and jacket having different physical properties. Cunningham teaches his method has the following steps: supplying a pre-fabricated core of endless material having a length of reserve through extrusion device, extruding a jacket made of a transparent thermoplastic onto the running core; and drawing the extruded jacket with the core to

exhaust a length of the core. Cunningham fails to teach the core is a colored core and the jacket is transparent. However, Hagen teaches a method for manufacturing by extrusion a multi-component fiber having colored core and a transparent/clear thermoplastic jacket (see Table 1 Example 1). Therefore, it would have been obvious to modify the Cunningham process by using a preformed core yarn which includes a coloring agent, a dye or pigment, and cool the thermoplastic jacket at a rate so as to effect the transparency of the jacket since Hagen discloses extrusion of a transparent thermoplastic jacket onto a colored core for the obvious aesthetic advantages of a colored multi component fiber with a transparent thermoplastic jacket. Finally, the examiner has interpreted the bristles set forth in the preamble as the multi-component fiber with colored core and transparent jacket thereon since no post treatment steps for cutting the colored core with transparent jacket thereon to form bristles for a brush have been set forth and ,therefore, as discussed above the Cunningham process as modified would have produced bristles or a multi-component fiber having structure within the scope of the claim. With respect to claim 19, Cunningham teaches the core is supplied in a compressed or twisted form. With respect to claim 25, Cunningham teaches the step of pretreating the core material with chemical and physical effective substances (see column 6 lines 28-50). With respect to claim 16, Cunningham teaches the core is supplied as an endless material having a drawing capacity which is deemed as high as reflected by the tensile modulus. With respect to claim 18, the recitation that plastic core is not being stretched prior to being supplied to the extrusion device broadly reads on the plastic core not being stretched prior to being supplied to the extrusion device

and Cunningham at column 5 lines 51-55 indicates stretching of the core as it is being supplied to the extrusion device is optional or is not required. With respect to claim 26, Cunningham teaches the core is an endless material which with the sheathing thereon provides on hygienic effect in that it is used for dental floss. With respect to claim 21, the recitation that all the length reserve is exhausted does not define over Cunningham in that the Cunningham claims that he may coat the core without stretching which would result in all the length of reserve being exhausted during the coating step. With respect to claim 17, Cunningham teaches twisting the core yarn being supplied to the extrusion device which would result in at least one non-linear monofilament being supplied to the extrusion device. With respect to claim 27, Hagen teaches multi color multi-component fiber may include using a metallized plastic material or a plastic material with a metallic coloring or pigment obviously using a metallic material itself. With respect to claim 28, Cunningham teaches the core consists of twisted monofilaments (see column 3 lines 34-43).

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham 5,601,775 in view Hagen and Cook.

Cunningham and Hagen are applied for the reason noted above. Cunningham fails to teach the core is supplied in a plaited form. However, Cook teaches that fishing lines may be constructed from filaments which have been twisted or plaited and then coated. Therefore, it would have been obvious to modify the Cunningham process for manufacturing multi-component monofilament to be used for fishing lines by substituting

the twisted core yarn with a plaited or braided core yarn since Cook teaches using a plaited or braided core yarn in construction of fishing lines.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham 5,601,775 in view of Hagen and Fujii et al.

Cunningham and Hagen each fail to teach the core is a metallized plastic. However, it would have been obvious given the modified Cunningham process to use a metallized plastic core since Fujii et al teaches the advantage of metallizing filaments- increased abrasion resistance and luster of the filaments.

Claims 22-24 are would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Lamb whose telephone number is (571) 272-1231. The examiner can normally be reached on Monday thru Tuesdays and Thursday through Friday with alternate Wednesdays off

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1734

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


BRENDA A. LAMB
PRIMARY EXAMINER

Lamb/LR
March 15, 2004